THE BIRDS OF ANTICOSTI ISLAND, QUEBEC

By Frank W. Braund and E. Perry McCullagh

THERE has been but little study of the avifauna of Anticosti Island, partly because the ownership of the entire island was for many years vested in the Menier family. They used the island as a private game preserve, permitting only invited guests the privileges of the area. Since 1926 the Consolidated Paper Corporation has held title to Anticosti and has commercialized the natural resources.

A. E. Verrill (1862a) was the first to report on the birds of Anticosti, publishing a list of the birds he observed there in the summer of 1861. William Brewster (1884) accompanied Professor Hyatt on an expedition to the Gaspé and Labrador. En route they circled Anticosti and landed at various points, including Fox Bay. Dr. Joseph Schmitt (1904) was posted on the island from 1896 to 1904 and included an account of the birds in his monograph devoted to the island. Fortunately his many specimens were identified by the ornithologist C. E. Dionne of Laval University. Later (1920) Dionne himself published a paper on Anticosti birds based on the reports and specimens of Mr. Willie La Brie who lived on the island in 1913, 1916, and 1917. W. Sprague Brooks spent August 23 to September 15, 1919 on the island and later allowed Harrison Lewis to utilize his manuscript list. In 1920 Brooks published a description of the Anticosti representative of the Canada Jay, calling it a new species. Harrison F. Lewis (1924 to 1938) has published one excellent general account and several shorter contributions devoted to the birds of the island.

Personnel and Itinerary

Our party consisted of the authors; Dr. F. W. Merica, a surgeon of Cleveland; and Mr. Philip N. Moulthrop, assistant mammalogist of the Cleveland Museum of Natural History. Dr. Merica made the trip especially for the sake of the fishing but sometimes volunteered to assist. Mr. Moulthrop devoted himself largely to the preparation of specimens. Mammals, as well as birds were collected. The field observations were made principally by the authors of this paper.

We arrived on the island the evening of June 16, 1937 and made our base at Fox Bay until our departure on the afternoon of July 1. We secured the use of a large motor sailboat and made trips to points as much as 30 miles away. We would sail to a protected bay, collect two or three miles into the interior, and then return by boat. Braund and Moulthrop and two guides made a brief collecting trip to Eel Falls where they camped from midday on June 27 to early afternoon on June 29.

Anticosti Island

Anticosti Island is situated in the northern part of the Gulf of St. Lawrence, about 360 miles east-northeast of Quebec City, between latitudes 49° 4′ and 49° 53′ north and longitudes 61° 40′ to 64° 30′ west. It is about 135 miles in length and averages about 25 miles in width.

The island is largely of limestone formation, the whole shore being marked by broad curves and shallow bays. From the north coast near its west end and along the entire south coast, reefs jut out as far as 3 miles to sea. The south shore is low, rising gradually in successive terraces from a few feet to 400 feet in height. This terracing disappears toward the center of the island. Along the north coast the cliffs rise sheer from 50 to nearly 400 feet in height. In most places the cliffs are a few yards from the sea but are farther back from the shore behind the bays. Every few miles the cliffs project to form huge rounded capes of crumbling limestones undercut by the waves.

There are about 100 rivers and brooks on the island, none of them navigable. Some of these streams flow to the sea on limestone floors in a succession of beautiful falls and rapids. Others, such as Salmon and Fox Rivers, enter the sea in wider channels over beds of sand and gravel. Lakes occur at all altitudes. Some are arms of the sea cut off by bars, some are rock-floored pools, and others on the plateaus are boggy ponds.

The geology of Anticosti Island is especially interesting in view of the fact that the late Ordovician and early Silurian deposits are believed to be more complete here than anywhere else in America. According to Twenhofel (1928), the rocks which make up the island were laid down evenly in shallow and comparatively quiet waters as sedimentary deposits of ancient seas. The inorganic materials were apparently derived from the erosion of the Canadian shield on the north mainland. The strata dip slightly to the south.

Typical notes on the weather during our stay at Fox Bay read as follows: "June 22, temperature at 7 A.M. 40° F., strong northeast wind, rain and fog all day. June 24, temperature about 40° F. with strong north wind all day, foggy with rain in the morning, fog continuing all day. June 28, temperature at 7 A.M., 58° F., east wind with rain, clearing at 10:30 A.M., sunny in afternoon." Fog is apparently much more common at the east than the west end of the island. According to Twenhofel (1928), summer begins in May and ends in August. Snow falls in October. The average low temperature in winter is —4° to —13° F. and the highest temperature occurs in July, the maximum being 78.8° F., with the average temperature from the latter half of May to August about 50° F. Our guides told us they had seen ice packs closing the channel between the north of the island and the mainland of Quebec, a distance of about 20 miles at its narrowest portion, as late as June.

Figure 1. Anticosti Island.

Plant and Animal Life

Much of the island is forested, chiefly with spruce and balsam fir. There is, however, some white pine, American aspen, and balsam poplar. Here and there about Fox Bay willows may be seen and inland near Eel Falls an occasional mountain ash, tamarack, paper and yellow birch.

Small mammals, except the white-footed mouse (*Peromyscus maniculatus*), are scarce or entirely lacking. The guides believed they have seen an animal which answered the description of a shrew, but we found none. The mouse differs from the white-footed mouse found elsewhere and has recently been described by Moulthrop (1937). The Norway rat (*Rattus norvegicus*) and European house house (*Mus musculus*) have apparently come to the island on ships.

The larger mammals include hares, muskrats, foxes, possibly minks and martens, beavers, otters, moose, and bears. The white-tailed deer is extremely common. Reindeer and elk have also been liberated on the island. The reindeer may be increasing. Of these animals it appears that the only ones which are indigenous are the white-footed mouse, the bear, and the otter. Fishers and bison introduced by Menier are presumed to be extinct, as are also the martens and the wapiti. In the sea near Fox Bay we saw many seals which the guides called "Tête cheval," a large seal perhaps 10 or 12 feet long, and smaller seals which they believed to be of different species. The large seal has been identified by Newsom (1937) as the gray seal (*Halichoerus grypus*).

Many of the streams abound in salmon and trout. Cod are numerous and many halibut are caught about Fox Bay. Lobsters occur about the submerged reefs and there is a good daily catch at Fox Bay. The remains of a large cannery on the shore of the bay seems to indicate that the lobster is now less plentiful than formerly. Eels occur in the rivers. Frogs are present but there are apparently no snakes on the island.

Collecting Stations

Fox Bay Camp.—Fox Bay is a broad, shallow bay, a little over a mile in width and somewhat less than a mile in depth. It lies on the north shore of the island about 15 miles from its east end and faces the sea toward the northeast. Much of its water is no more than one to one and a half fathoms in depth. Its northwest and southeast extremities are marked by rounded points of land. The former shows the beginning of low cliffs but the latter, Reef Point, is backed by hilly land. From this point as its name suggests, a long reef extends and is marked by the waves which break over it. The shore is rough shale gravel, which along the whole mid-portion of the bay is thrown back into a round, even ridge 10 to 15 feet above the sea and 50 to 100 feet in depth. This is topped by deep coarse grass, blue iris, and dandelions and behind it a few small trees. Behind this ridge lies a broad, very shallow bay. Into

this bay at its northeast end enters "La Grande Riviére" and at its southeast end, enters "La Petite Riviére," surrounding a small island. To the east of the bay and behind it, the low land is forested in patches with spruce and balsam. Farther back, the land rises gently to small, boggy lakes. It was impressive to see a series of two or three such lakes within a few yards of each other, their water levels arranged like steps 6 to 10 feet in height. In these lakes we found the Great Black-backed Gulls nesting.

On the southeastern curve of the ridge around the bay stand two houses and a few small frame buildings. One of the houses is the home of M. Noel, a game warden, and the other, our headquarters, is a house built previous to 1900 by the government as a post for observers. Behind these houses the land falls away to a wooded meadow containing willows as well as evergreens. Farther back the trees are dwarfed, many spruces and tamaracks only a few feet in height surrounding low, wide areas of bog heath and sedge mat. Here the wet trail led between hummocks of moss covered with Labrador tea, azaleas, and blue-berries, among which grow several types of small flowers. These heaths called by the natives "les plains" are a mile or more in length and if one walks toward their centers the sedge mat quakes threateningly at the edges of black pools in some of which deer had drowned.

Traveling by boat southeast along the coast, we watched seals at play at the bases of the waterfalls and on the lower cliffs European Cormorants on their nests. About 6 miles from Fox Bay one may, by entering along a stream bed, gain the top of a cliff. Here we walked eastward along a rough trail which follows the telephone line surrounding the island. The trail passes through stands of spruce and balsam 20 to 30 feet in height, crosses small streams and traverses wide, boggy marshes which extend to the edges of the cliffs facing the sea. At the edge of this trail, we looked over Gull Cliff Bay to the nesting sites of thousands of sea birds. At the top of the long curve of the cliff we stood about 125 feet above the sea. The short, gnarled spruces were bent away from the sea, and here and there were the remains of Kittiwakes and Gannets which had probably fallen prey to foxes. Along this cliff by thousands the neat nests of the Kittiwakes were placed on the small ledges, most of them completely inaccessible due to the overhand of the cliff.

Eel Falls Camp.—Starting from the camp at Fox Bay we traveled southward. Behind the first long row of boggy "plains" the trail leads in the general direction of "La Petite Riviére" across wet wooded bogland. Following this rough trail for about four miles south of Fox Bay, we returned to the banks of the river and climbed upward to the lower margin of a heavily wooded ridge which rises sharply to a new plateau about 50 feet above. There we found that the little river pitched off a bench of rock into a neat cylindrical basin of limestone 25 to 30 feet

in height and 30 feet in diameter. Here hundreds of eels were clinging to the wet limestone beneath the falls to which they give their name. At a little distance from the falls near the edge of the stream we pitched our camp. This long ridge is thickly wooded with tall spruce, balsam, and birch. Southward above the ridge the land is flat again and leads away gradually to shorter trees and another series of long, open muskegs dotted with small lakes.

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List of Birds

The following list includes the 179 species and subspecies which have been authoritatively recorded from Anticosti Island. In a number of cases we have used the scientific names recently advocated by Dr. Oberholser (1938). New subspecies of *Penthestes atricapillus, Certhia familiaris,* and *Geothlypis trichas* are described in this paper. Our specimens are deposited in The Cleveland Museum of Natural History.

As Lewis (1926:179) has pointed out, Ellis Bay of earlier authors is now called Port Menier.

Gavia immer immer (Brünnich). Common Loon.—Lewis (1924) observed this loon "rather commonly at Ellis Bay." Verrill (1862a) lists it as "very common." Brewster (1884) says "of general distribution along the Gulf." Schmitt (1904) found newly hatched young July 7, 1901.

We found this loon common along the coast, feeding in the calm salt water bays as well as inland on the larger muskeg lakes. From 2 to 10 individuals were seen almost daily at Fox Bay and Eel Falls between June 17 and 30.

Gavia stellata (Pontoppidan). Red-throated Loon.—Verrill (1862a) says "very common, breeds." Brewster (1884) saw the Red-throated Loon on Anticosti. Schmitt (1904) found it "fairly common." Dionne (1920) also reported it very common. Lewis (1938b) writes that he saw two adult Red-throated Loons with one downy young bird July 15 in a pond near Port Menier and an adult and young the next day in another pond.

We found one individual on June 23, two miles east of Fox Bay.

Colymbus auritus (Linnaeus). Horned Grebe.—Schmitt (1904) says a young specimen was killed in October at Sanatorium Bay at the west end of the island. Dionne (1920) saw two in 1916. Brooks (1919) saw a female with three downy young on Lake Gamache. Lewis (1924) observed several pairs at Ellis Bay.

Puffinus griseus (Gmelin). Sooty Shearwater.—Schmitt (1904) says of this species that it is rather rare in summer, being seen sometimes offshore from the island.

Oceanodroma leucorhoa leucorhoa (Vieillot). Leach's Petrel.—Verrill (1862a) often saw these petrels about Anticosti but found none breeding. Schmitt (1904) lists them as rather common in summer.

Oceanites oceanicus (Kuhl). Wilson's Petrel.—Brewster (1884) found this species common and of general distribution. Schmitt (1904) considered the species rare and very irregular in occurrence.

**Moris bassana* (Linnaeus). Gannet.—Verrill (1862a), Schmitt (1904), and Dionne (1920) report this bird as common at Anticosti Island, while Brooks (1919) saw a number flying off Ellis Bay and was informed by M. Gagnon that a colony bred at Wreck Bay at the east end of the island. In 1923 Captain Oscar Mercier (Lewis, 1924) stated that he believed that Gannets had nested on the high Gull Cliffs between Heath Point and Fox Bay during all of his ten years experience in the region.

We found the Gannet rather abundant along the north coast of the island, feeding off the capes from early morning to late evening. Though the cliffs west of the Fox Bay Camp were about the same elevations as those to the east of the bay the birds were confined to the latter location where there was a concentration in two large colonies at Gull Cliff Bay. The precipitous cliffs in this area are about 200 feet high with narrow jutting ledges of limestone 3 to 4 feet wide, and 10 to 30 feet below the sod-covered top. Here, with thousands of Kittiwakes, Murres, Puffins, Guillemots and Razor-billed Auks, were nesting approximately 500 Gannets. The nests were untidy, wet, foul-smelling masses of seaweed and kelp with a few tufts of moss and grass. Their total depth was from 6 to 8 inches and their diameter 24 inches. The edges of the nests hung loosely over the ledges. In the center of the mass was a poorly defined depression, 4 to 6 inches in diameter, in which were laid single, deeply stained, reddish brown eggs. The occasional fresher egg was grayish white. Eggs collected from eight of these nests on June 27 ranged from fresh to two-thirds incubated. The same day there were many more young in the nests than eggs. Most of the adults refused to leave their nests, even when we descended with rope and steel ladder to within a few feet of them. Throwing bits of rock was not enough to dislodge them. Many of them moved awkwardly about their nests in mild excitement, making a guttural grunting sound. While so doing one individual disgorged a large half-digested fish.

**Phalacrocorax carbo carbo* (Linnaeus). European Cormorant.—The status of this species seems to have varied in the past. Verrill (1862a) reports, "breeding in large numbers on cliffs at East Point." Brewster (1884) found a breeding colony of about 20 nests at Wreck Bay. Schmitt (1904) found it especially in the eastern part of the island at Fox Bay. In contrast to these observations, Lewis (1924) reports, "the present status of this species on Anticosti is uncertain, but it is probable that some breeding colonies still exist there." Oliver Austin, Jr. (1932) states, "the European Cormorant formerly bred south to Newfoundland, the Gulf of St. Lawrence, and the Bay of Fundy. A few are still reported to breed in the Gulf of St. Lawrence." On June 20, six miles east of the Fox Bay camp, we collected two and observed hundreds of European Coromorants in company with Kittiwakes and Murres nesting on the ledges of the cliffs. The cliffs in this area varied in height from 100 to 300 feet. In the Salmon River

* We have marked thus all species of which our party collected specimens.

district, 36 miles west of the Fox Bay camp on June 26, a second colony was observed. The nests of sticks, kelp and other sea-weed contained well-developed young on June 20 and 26.

Phalacrocorax auritus auritus (Lesson). DOUBLE-CRESTED CORMORANT.—Schmitt (1904) says that this cormorant nests on the island and is fairly common in summer; Dionne (1920) found it fairly common.

Ardea herodias herodias (Linnaeus). GREAT BLUE HERON.—Verrill (1862a) saw what appeared to be a Great Blue Heron at Ellis Bay. Schmitt (1904) lists it as rare, one collected at Ellis Bay. Dionne (1920) saw only one on the island.

Botaurus lentiginosus lentiginosus (Montagu). AMERICAN BITTERN.—Verrill (1862a) caught a young bird August 4. Schmitt (1904), Dionne (1920), and Brooks (1919) report this species common.

We saw an American Bittern June 23, two miles east of Fox Bay.

**Branta canadensis canadensis* (Linnaeus). COMMON CANADA GOOSE.—Verrill (1862a), Brewster (1884), and Schmitt (1904) found this species common and breeding. Lewis (1924) saw 16 at Ellis Bay on June 10.

On a small inland lake studded with numerous small islands, 2 miles southeast of the Fox Bay camp, an old gander with 3 very small downy young was found on June 25 swimming and feeding along the grassy shores of the lake. The nest on a small island was observed through the glass and appeared to be of grasses only. The female concealed in the tall grasss at the upper end of the lake could be heard protesting our presence. The gander and one gosling were collected. The remaining 2 goslings were placed under the care of our neighbors, the Noel family, where they were thriving when we departed July 2. On June 28, a pair was surprised while feeding in a grassy area 50 feet from the shore of a small lake in a muskeg area near the Eel Falls camp. Considerable time was consumed in an unsuccessful attempt to find the nest. On June 21 we saw a goose flying low over the sea three miles west of the Fox Bay camp.

Branta bernicla hrota (Müller). AMERICAN BRANT.—Schmitt (1904) and Dionne (1920) report this species as common during migration spring and fall. Lewis (1924) reports seeing large flocks of 3,000 to 4,000 birds at Ellis Bay on June 10, 1922.

Chen hyperborea atlantica Kennard. GREATER SNOW GOOSE.—Schmitt (1904) says that young birds in gray plumage were observed occasionally along the coast.

Anas rubripes Brewster. BLACK DUCK.—Verrill (1862a) found it "very abundant, young seen July 3." Brewster (1884) also lists this species as "common, brood of young seen." Schmitt (1904), Dionne (1920), and Brooks (1919) all list the Black Duck as very common. Lewis (1924) saw 4 at Ellis Bay on June 14, and 5 on June 15.

We saw a small flock of 6 adult birds in a small bay along the sea on June 23.

Chaulelasmus streperus (Linnaeus). GADWALL.—Verrill (1862a) reports a few individuals were seen and a young one collected.

Dafila acuta tzitzihoa (Vieillot). AMERICAN PINTAIL.—Schmitt (1904) reports this species as rare but nesting on the island. Lewis (1924) quotes from a letter from Verrill that one of his party collected 2 specimens on August 6. Lewis (1926) observed 7 at Port Menier on May 26.

Nettion carolinense (Gmelin). GREEN-WINGED TEAL.—Schmitt (1904) lists this species as rare. Dionne (1920) writes, "Rare; found only one pair with 9 young." Brooks (1919) saw a flock of 30 on August 26, 1919. Lewis (1926) records several seen at Port Menier from May 23 to June 1.

We saw one individual on June 18 at Fox Bay.

**Querquedula discors* (Linnaeus). BLUE-WINGED TEAL.—Brewster (1884) says, "fishermen report that small numbers occur at Fox Bay."

On June 20, we collected a male in small marsh near Fox Bay. On June 25 a second Blue-winged Teal was observed 3 miles south of the Fox Bay camp. On

June 28, 2 were flushed from a small muskeg lake in the close proximity of the Eel Falls camp.

So far as we know, Anticosti Island marks the northeastern limit of the range of this species.

Spatula clypeata (Linnaeus). Shoveller.—H. E. Graham (1939) reports shooting a Shoveller which came in with a flight of Black Ducks at the west end of the island on October 11, 1938.

Nyroca americana (Eyton). Redhead.—Schmitt (1904) records it as rare in migration.

Perissonetta collaris (Donovan). Ring-necked Duck.—Schmitt (1904) says he collected one, May 26, 1902, but considered it rare.

Fulix marila nearctica (Stejneger). Greater Scaup Duck.—Lewis (1924) saw 12, presumably of this species on June 10, 4 on June 14, 1922, at Lake Gamaché, Ellis Bay, and (1926) again reports having seen several in 1926. Schmitt (1904) reports it was seen only in the spring during migration.

Fulix affinis (Eyton). Lesser Scaup Duck.—Schmitt (1904) says that this duck occurs in the autumn, winter, and spring and a few nest on the island.

Glaucionetta clangula americana (Bonaparte). American Golden-eye.—Schmitt (1904) found it fairly common throughout the year. Dionne (1920) lists it as common. Brooks (1919) noted several near Ellis Bay. Verrill (1862a) caught young of this species one-third grown on July 9.

Glaucionetta islandica (Gmelin). Barrow's Golden-eye.—Schmitt (1904) records this species as fairly common except in summer, stating that some always nest on the island.

Clangula hyemalis (Linnaeus). Old-Squaw.—Verrill (1862a) found this species very common, breeding abundantly. Brewster (1884) saw a few at East Point, July 7. Schmitt (1904) lists it as passing the winter on the island but not nesting. Dionne (1920) considers it a common transient. Lewis (1924) saw one at Ellis Bay, June 13, 1922.

Histrionicus histrionicus histrionicus (Linnaeus). Eastern Harlequin Duck.—Schmitt (1904) found this species in the region of South Point.

Somateria mollissima borealis (Brehm). Northern Eider.—Schmitt (1904) records it as fairly common in winter from September to April.

Somateria mollissima dresseri Sharpe. American Eider.—Verrill (1862a) reports this bird "common about Anticosti." Schmitt (1904) and Dionne (1920) both report it as "very common." Lewis (1930) writes, "large batch of American Eiders observed along south shore of Labrador Peninsula in 1929." Townsend (1916) translating Beetz's notes writes, "American eiders have been in the habit of nesting on the isles of the Gulf." We saw 2 at Deep Bay on June 30.

Somateria spectabilis (Linnaeus). King Eider.—Verrill (1862a) saw a skin that had been collected on the island. Brewster (1884) and Schmitt (1904) both mention that the natives assured them that it was common in winter. Dionne (1920) lists it as fairly common.

Melanitta deglandi (Bonaparte). White-winged Scoter.—Brewster (1884) observed this bird at East Point. Schmitt (1904) lists it as, "fairly common." Lewis (1924) saw one at Ellis Bay June 13, 1922. Macoun (1909) writes, "at Anticosti it arrives about the end of May and remains about a month."

A small flock of this species was seen several times, feeding in the shallow protected bays of the sea west of Fox Bay. They were extremely shy, taking wing when we ventured nearer than 200 to 300 yards. Recorded observations were: Galleote River to Heath Point, 2 on June 17; 2 miles west of Fox Bay, 20 on June 20, 1937.

Melanitta perspicillata (Linnaeus). Surf Scoter.—Schmitt (1904) recorded this duck as fairly common. Dionne (1920) considered it common during migration. Lewis (1924) saw one at Ellis Bay, June 13, 1922.

Oidemia americana Swainson. American Scoter.—Dionne (1920) observed this scoter several times. Schmitt (1904) found it rather rare.

We saw a flock of 3 on June 20 at Fox Bay.

Lophodytes cucullatus (Linnaeus). Hooded Merganser.—Brooks (1919) relates that several were seen in summer of 1919 by Professor W. H. Twenhofel.

Mergus merganser americanus Cassin. American Merganser.—Combes (1896) lists this bird without comment. Schmitt (1904) found it rather common. Brooks (1919) writes: "a few were noted in the summer of 1919 by Professor W. H. Twenhofel of the University of Wisconsin."

We found this species quite common, though not as abundant as the Red-breasted Merganser, between June 17 and 27. It was observed along the north shore in the tide water bays and the mouths of streams. It appeared in flocks of 2 to 12 birds.

**Mergus serrator serrator* (Linnaeus). Red-breasted Merganser.—This was one of the commonest of the ducks found on the island, 78 individuals being observed in 8 days. Verrill (1862a) reported a nest with 6 eggs found July 17, and young seen July 3, and Schmitt (1904) found a nest with fresh eggs July 20, 1903. Dionne (1920) and Brooks (1919) both report this form common on the island.

This species occurred along the coast and in the river mouths where it was observed feeding in the open pools of the rivers and streams. None were seen in the numerous lakes of the muskeg areas in the vicinity of the Eel Falls camp.

On June 18 we found a nest with 12 fresh eggs on the ground, sheltered and completely hidden by low-growing, matted branches of spruce. The nest, composed of short dead spruce twigs with a small quantity of down ringing the outer edge of the cupped depression, was located on a small island in a pool at the mouth of Fox Bay. The female was collected.

Astur gentilis atricapillus (Wilson). Eastern Goshawk.—Schmitt (1904) reports this bird as a rare permanent resident. Dionne (1920) found it not common. Brooks (1919) says the species is common at Ellis Bay.

Accipiter striatus velox (Wilson). Sharp-shinned Hawk.—Verrill (1862a) saw one at Salmon River. Schmitt (1904) and Dionne (1920) reported it common.

Buteo jamaicensis borealis (Gmelin). Eastern Red-tailed Hawk.—Schmitt (1904) records this species as a rather rare permanent resident.

Buteo lagopus s.johannis (Gmelin). American Rough-legged Hawk.—Schmitt (1904) writes that this species was common some years.

Aquila chrysaëtos canadensis (Linnaeus). Golden Eagle.—Combes (1896) reports Mr. Gibsone, lighthouse keeper at Heath Point, gave him a foot of a Golden Eagle. Schmitt (1904) lists it as a rare permanent resident bird and found a nest on Jupiter River.

Haliæetus leucocephalus washingtoniensis (Audubon). Northern Bald Eagle.—Verrill (1862a) saw one or two in July at Ellis Bay. Schmitt (1904) calls the Bald Eagle a rare permanent resident which nests in June and July. Dionne (1920) found it fairly common. Brooks (1919) saw one or two every day.

Circus cyaneus hudsonius (Linnaeus). Marsh Hawk.—Schmitt (1904) and Dionne (1920) list this hawk as rather rare.

**Pandion haliaëtus carolinensis* (Gmelin). Osprey.—Lewis (1924) reports one nesting at Ellis Bay, June 15. Verrill (1862a), as well as Brewster (1884), report seeing a few at Ellis and Fox Bays. Dionne (1920), however, reports this species as very common.

The natives reported a small colony of Ospreys nesting in the vicinity of Ellis Bay, stating that this bird was much more numerous on the south than on the north shore of the island. A pair was observed each day, usually appearing in mid-afternoon to fish over the western portion of Fox Bay. After the capture of a fish they would fly southwest to the interior of the island, to return within 30 minutes to fish again. Undoubtedly this pair was feeding young somewhere southwest of the Fox Bay camp.

We collected a female at Fox Bay on June 22, 1937.

Falco rusticolus obsoletus Gmelin. Black Gyrfalcon.—Schmitt (1904) reports seeing a few each summer. Dionne (1920) saw one in 1916.

Falco peregrinus anatum Bonaparte. Duck Hawk.—Dionne (1920) saw this hawk quite frequently on Anticosti.

Falco columbarius columbarius Linnaeus. Eastern Pigeon Hawk.—Schmitt (1904) lists it as occurring rarely in the summer. Dionne (1920), however, considered it very common. Brooks (1919) found this hawk fairly common about Ellis Bay. Lewis (1938a) saw one stoop at 2 Greater Yellow-legs along the shore at Port Menier on May 25, 1926.

Cerchneis sparveria sparveria Linnaeus. Eastern Sparrow Hawk.—Schmitt (1904) reported this little hawk as rather rare and as occurring in summer only. Dionne (1920) saw one individual.

Bonasa umbellus togata (Linnaeus). Canada Ruffed Grouse.—Lewis (1926) saw a number in the vicinity of Port Menier and was informed by the natives that this bird had been recently introduced from mainland stock.

We saw none but were informed by the natives that they were fairly common.

Lagopus rupestris rupestris (Gmelin). Rock Ptarmigan.—Lewis (1924) writes, "Brewster has recorded 2 specimens taken on Anticosti by Mr. Gardiner, of his party." Schmitt (1904) lists them as a fairly common permanent resident bird.

The natives informed us that a very few were still seen from time to time.

Porzana carolina (Linnaeus). Sora.—Schmitt (1904) found this rail rare in summer. One specimen collected by M. Malouin was given to Schmitt. Dionne (1920) saw but one individual.

Gallinula chloropus cachinnans Bangs. Florida Gallinule.—Schmitt (1904) says of this species: "Summer. Rather rare."

Fulica americana americana Gmelin. American Coot.—Schmitt (1904) considers the Coot a rare summer resident.

Charadrius semipalmatus Bonaparte. Semipalmated Plover.—Dionne (1920) found this plover fairly common in autumn. Brooks (1919) saw a small flock on August 26.

Oxyechus vociferus vociferus (Linnaeus). Killdeer.—Dionne (1920) reported a single bird seen on the beach at Anse aux Fraises.

Pluvialis dominica dominica (Müller). American Golden Plover.—Schmitt (1904) found it fairly common in autumn. Dionne (1920) records it as fairly common.

Squatarola squatarola squatarola (Linnaeus). Black-bellied Plover.—Schmitt (1904) observed them fairly common during autumn migration. Dionne (1920) also considered it fairly common. Brooks (1919) saw a number near Ellis Bay.

Arenaria interpres morinella (Linnaeus). Ruddy Turnstone.—Schmitt (1904) reports the Ruddy Turnstone as fairly common in September. Dionne (1920) found it common in autumn. Brooks (1919) reports having seen several.

Rubicola minor (Gmelin). American Woodcock.—We have been unable to find any definite record that this species has been collected or seen on Anticosti. Brewster (1884) writes, "Mr. Gardiner thought that he flushed another [Woodcock] in a springy place at Fox Bay, Anticosti, but the foliage was so dense that he did not get a clear sight of it." The Consolidated Paper Corporation, owners of Anticosti, list Woodcock as one of the game birds to be taken in season. From this it would seem that more Woodcock occur on the island during migration than published observations disclose.

We saw but one of this species. It was observed for several minutes on June 28, feeding along the mucky border of a muskeg area before taking flight.

**Capella gallinago delicata* (Ord). Wilson's Snipe.—Judging from our experience and that of all other authors, this snipe is apparently fairly common on Anticosti Island, appearing along the mud flats and seashore to feed early in the morning among the kelp and debris left by an ebbing tide. It was observed to leave its feeding grounds singly and in pairs for the interior in the mid-forenoon. Along

the shores of the ponds of the muskeg areas at the Eel Falls camp it was observed feeding in small groups during the latter part of the day. This species undoubtedly breeds on the island, though no nests have been reported to date. We collected a female at Fox Bay on June 18.

Phaeopus hudsonicus (Latham). HUDSONIAN CURLEW.—Brewster (1884) saw at East Point large flocks of what he took to be this species. Schmitt (1904) observed it during autumn migration. Dionne (1920) lists it as fairly common.

**Actitis macularia* (Linnaeus). SPOTTED SANDPIPER.—This species was not as common about Fox Bay as others have evidently found it elsewhere on the island. Verrill (1862a), lists it as common, breeding; Brewster (1884) abundant. Schmitt (1904) says, "fairly common; nests on the island."

We found this species not common in the areas explored, occurring only locally along the sea coast. Extending west of Fox Bay and encircling the bay is a ridge of loose washed limestone, with an elevation of 6 feet above high tide. This ridge flattens at its top to a width of 10 to 30 feet and extends some 2 miles to meet the receding cliff at the western extremity of the bay. Behind this ridge lie fresh water bays of Fox River and salt water lagoons. Where a little spruce needle humus gathers along the ridge top, there appears a luxuriant growth of coarse tall grass. Other areas are topped with various sizes of round and flat limestone dotted with an occasional tuft of weed or grass. This is the habitat of the Spotted Sandpiper and we observed but few elsewhere. On the ridge, three-fourths of a mile west of the Fox Bay camp, stood an abandoned lobster cannery shed with several smaller storage sheds. Several of these had collapsed with timber and shingle debris scattered over the ridge top. A bird, which proved to be the female, was flushed from between two timbers of one of these collapsed sheds, its behavior indicating a nesting bird. We collected the bird and found the 4 eggs and nest, a slight depression in the shingle debris ringed with a few dry stems of grass.

It has been the general opinion that incubation of the eggs is performed entirely by the male of the species. A. C. Bent (1929) says, "in incubation as well as courtship, the male [Spotted Sandpiper] has been shown to assume duties which are usually ascribed to the female." From our findings it would appear that the female at least shares the incubation duties.

We flushed a second bird from a densely grassed area, 100 yards from the above described nest. The vegetation being dense, it was deemed advisable to retire lest in looking for the nest it be trampled upon. That afternoon, we again visited the location, the male flushed and was collected and the nest, well built of dry grass with a well defined bowl, was found concealed in a tuft of high grass.

Tringa solitaria solitaria Wilson. EASTERN SOLITARY SANDPIPER.—Schmitt (1904) found this species rather rare. Brooks (1919) saw one near Ellis Bay on August 28. Lewis (1926) saw a single individual at Port Menier, May 28.

**Totanus melanoleucus* (Gmelin). GREATER YELLOW-LEGS.—We found this species common as did Verrill (1862a), Brewster (1884), and Dionne (1920). Schmitt (1904) states, "nests on the island." Lewis (1924), however, records this bird as "not common at Ellis Bay, June 10-16, 1922."

The Greater Yellow-legs were common over the entire area worked by our group, being observed inland about the muskeg lakes as well as along the seacoast. Small flocks fed along the seashore in the morning at low tide. During the day the Yellow-legs in pairs or singly could be seen or heard traveling inland or back to the sea. On June 25, Dr. McCullagh, while working a muskeg area 2 miles southeast of the Fox River camp, flushed a pair of Greater Yellow-legs from the deer moss and grass. The pair circled closely and dived and darted at the intruder with all the indication of having a nest or young in the immediate vicinity. Considerable time was consumed in an unsuccessful attempt to find the nest or young. This species doubtless breeds along the shores of the inland muskeg lakes. We collected several specimens at Fox Bay June 18 to 24.

Calidris canutus rufus (Wilson). American Knot.—Schmitt (1904) lists this species as rare.

Pisobia melanotos (Vieillot). Pectoral Sandpiper.—Schmitt (1904) reports it common in September. Dionne (1920) found it very common.

Pisobia fuscicollis (Vieillot). White-rumped Sandpiper.—Verrill (1862a) found this form in large flocks on August 14. Schmitt (1904) reports it fairly common in autumn. Dionne (1920) and Brooks (1919) both record it as abundant.

**Pisobia minutilla* (Vieillot). Least Sandpiper.—We did not find this species as abundant in the Fox Bay region as have others elsewhere on the island. Verrill (1862a) states that "large numbers were seen on a large marshy heath near Ellis Bay where they appeared to be nesting." Brewster (1884) says, "few were observed daily along beaches at Fox Bay." Schmitt (1902) recorded it as "very common." Brooks (1919) says, "quite common along shores of Ellis Bay." Macoun (1909) is of the opinion that it breeds in small numbers on Anticosti Island.

We collected the female of a pair flushed from a muskeg area two miles southeast of Fox Bay camp on June 25.

Ereunetes pusillus (Linnaeus). Semipalmated Sandpiper.—Schmitt (1904) reports this sandpiper as fairly common.

Crocethia alba (Pallas). Sanderling.—Schmitt (1904) found it common during autumn migration. Dionne (1920) lists it as very common.

Steganopus tricolor Vieillot. Wilson's Phalarope.—Schmitt (1904) considered this species very rare, probably accidental.

Lobipes lobatus (Linnaeus). Northern Phalarope.—Brewster (1884) saw a flock and collected specimens between Cape Rosier (Gaspé) and Anticosti. Schmitt (1904) found it, at first appearing irregularly, then rather commonly. One specimen was killed, June 9, 1902.

Stercorarius parasiticus (Linnaeus). Parasitic Jaeger.—Verrill (1862a) saw it frequently in the gulf. Schmitt (1904) collected three specimens but lists it as rather rare, July to September.

Stercorarius longicaudus Vieillot. Long-tailed Jaeger.—Schmitt (1904) was in possession of a single specimen taken about 1900 and considered the species very rare.

Larus hyperboreus hyperboreus Gunnerus. Glaucous Gull.—Schmitt (1904) found this big gull wintering on the island.

Larus leucopterus Vieillot. Iceland Gull.—Schmitt (1904) says that this species occurs occasionally in winter. Lewis (1927) identified two individuals at Ellis Bay on May 21, 1927.

**Larus marinus* Linnaeus. Great Black-backed Gull.—Our observations are in accord with those of other authors who record that this big gull breeds rather commonly on Anticosti Island.

Austin (1932) says, "the Great Black-backed Gull is not a colonial breeder, though throughout the lower two-thirds of Labrador breeding pairs are thickly distributed, especially in districts where there are many small islets." This was the type of breeding locality selected on Anticosti Island. On June 18, we visited near Fox Bay a small shallow lake of but 2 or 3 acres which contained 10 or 12 small grassy islands. A small colony of Great Black-backed Gulls, probably 10 pairs, was nesting on the small islands. Nests of previous years were evident immediately adjacent to the nests then occupied with downy young or eggs with well advanced embryos. Downy young were observed partly hidden in the overhanging grasses along the small islands. One nest with a pipped egg and one downy young was found on an exposed knob not over 2 feet in diameter. The nest practically covered the tiny islet. Several other lakes in the immediate vicinity, containing similar island habitats, were explored in vain for indication of former nesting. Since the adjoinng lakes, some within 100 yards, offered similar habitats it is difficult to understand why this colony insisted upon the occupancy of this particular island lake year after year.

Larus kumlieni Brewster. Kumlien's Gull.—Two individuals of this form, now supposed by many to be a hybrid between *Larus leucopterus* and *Larus argentatus thayeri,* were identified by Lewis (1927) in Ellis Bay on May 21, 1927.

**Larus argentatus smithsonianus* Coues. Herring Gull.—All previous writers agree as to the abundance of this species on Anticost as well as most other localities in the Gulf of St. Lawrence.

We found the Herring Gull abundant all along the northeast shore of the island. Between Lobster Bay and Cape Henri a slight indentation in the cliff wall forms a snug little bay guarded on the east by a 400 foot perpendicular limestone cliff, at the foot of which were enormous triangular shaped fragments of the cliff deposited during an earthquake disturbance of some 7 years before. These fragments, while reaching elevations of 20 feet or more, could be scaled without the use of ladder equipment. There were small, comparatively flat areas along their sides and on their peaks which afforded nesting sites for a colony of Herring Gulls. The cavities and seams were occupied by a colony of Black Guillemots. Elsewhere along the high cliffs we had observed many downy young Herring Gulls, some in nests, others traversing the narrow limestone ledges, indicating early nesting of this species. In view of its known habit of early breeding, we were agreeably surprised to find 2 nests of 3 eggs, 5 nests of 2 eggs, and 11 nests containing but one egg, all eggs unincubated. Our French guides seeing our perplexities explained that coastal fisherman, desiring fresh eggs, oftimes land in small boats and augment their ship's fare with the fresh eggs from this colony of Herring Gulls and Guillemots. Doubtless these eggs were of a second laying as a result of earlier depredations. The nesting of this Anticosti colony was, as P. A. Taverner has expressed it, "on the ground or rocky ledges or flat tops of isolated rocks in nest of seaweed or vegetable matter."

Larus delawarensis Ord. Ring-billed Gull.—Schmitt (1904) lists it as rather rare; specimen collected September 18, 1901. Lewis (1926) reports a number observed at Port Menier from May 20 to May 30.

Larus philadelphia (Ord). Bonaparte's Gull.—Verrill (1862a) found this little gull abundant at the Gut of Canso, August 21, but at no other time. Schmitt (1904) reports it as rather common in summer. Brooks (1919) saw a few on August 22 and 23 on the Gulf.

Pagophila alba (Gunnerus). Ivory Gull.—Schmitt (1904) reports it very rare. He collected a specimen October, 1902.

**Rissa tridactyla tridactyla* (Linnaeus). Atlantic Kittiwake.—As have apparently all other authors, we found this species the most abundant sea bird on the island, ranging along the entire north shore. Because of their great abundance, it was difficult to estimate the number of Kittiwakes observed during the day. On June 27, in the vicinity of Birds Bay, we estimated a total of 10,000 individuals, with thousands nesting along the cliffs. Kittiwakes in a continuous line were flying east along the cliff approximately 100 feet above the sea, while others in a continuous line returned flying west just above water line, giving the appearance of two well directed lines of traffic along a city street.

The ledges below the level of the Gannet nests at Birds Bay were occupied chiefly by the Kittiwakes. The ravages of wind and weather had worn away the lower four-fifths of these cliffs so as to produce an overhang of 10 to 20 feet. The nests of the Kittiwake were placed under this overhang and extended from 50 to 60 feet from the top to within 25 feet of the beach. Most of the nests were on small shelves of thin limestone.

The nests were neat structures, well built, chiefly of moderately fine grasses and moss with an occasional bit of seaweed. Most of the nests were of a rounded, low conical shape, the edges hanging over the ledge. Two or three eggs occupied the cup-shaped depressions which were 2 to 3 inches in depth.

**Sterna hirundo hirundo* Linnaeus. Common Tern.—We found the Common Tern all along the north shore and concur with Schmitt (1904), Dionne (1920),

and Brooks (1919), all of whom report this species as common. Lewis (1924) reports, "Terms, either Common or Arctic," occurring at Ellis Bay.

We found no indication of the breeding of this species, but Mr. Graham, Island Manager, informed us that the tern (probably the Common Tern) nested about the first of June on the stone reefs in Ellis Bay.

**Alca torda* Linnaeus. Razor-billed Auk.—There is some variance of opinion among earlier writers as to the abundance of this species. Verrill (1862a) reports, "common; breeds on the east and north shores." Brewster (1884) writes, "numerous at Wreck Bay." In contrast to these reports, Schmitt (1904) says, "found only in autumn, rather rare." Brooks (1919) "saw only single specimen near North Cape, Sept. 13, 1919." Lewis (1924) records "one seen near West Point, June 16, 1922." Macoun (1909) writes, "breeds, but not in large numbers on the Great Bird rock, Bryon island, Entry island and Magdalen islands, Gulf of St. Lawrence."

We found the Razor-billed Auk fairly common along the rocky cliffs of the north shore, nesting in the crevices and fissures of cliffs of 20 to 30 feet of elevation. Its numbers, apparently much depleted in the period following Brewster's visit, appear to have been somewhat restored.

We collected eggs from six nests (3 and 6 miles east of Fox Bay) on June 20 and 21. Some eggs were fresh but others were about to hatch.

**Uria aalge aalge* (Pontoppidan). Atlantic Murre.—Although Macoun (1909) records only two breeding locations for this species in the Gulf of St. Lawrence, not including Anticosti, most ornithologists who have worked on this island have recorded it as breeding.

We found this species rather abundant along the north shore, concentrating at Birds Bay, where the 300-foot cliffs afforded an ideal nesting area. On June 20 we visited this area and estimated 100 pairs of Murres nesting with the Gannets in the immediate vicinity of Birds Bay. On June 26, in the vicinity of Salmon River where cliffs attain a height of 370 feet, we estimated 75 nesting Murres.

At Birds Bay on the wider ledges of limestone, 30 to 50 feet from the top, sat groups of Murres in rows, chiefly with their backs to the sea, standing upright, bowing to each other, and solemnly pronouncing their names in low, hoarse voices. These nesting ledges were 4 to 12 feet wide, fairly level, with a slight slope to the sea. These ledges were covered with a wet slippery deposit of loam. The eggs lay scattered, some 3 feet from the cliff's edge, others but a few inches, their peculiar pyriform shape being their only protection against rolling off the edge. Eggs collected from six nests at Birds Bay on June 27 ranged from fresh eggs to those about to hatch.

Alle alle (Linnaeus). Dovekie.—Schmitt (1904) found the Dovekie common from September to May. Dionne (1920) says it is common in autumn and winter.

**Cepphus grylle grylle* (Linnaeus). Black Guillemot.—All former writers agree as to the abundance of the species on Anticosti Island. We found the Black Guillemot to be very abundant along the north coast. The natives call this bird "pigeon de mer," asserting that the flesh of the Black Guillemot, like that of the Puffin and Razor-billed Auk, is very palatable in the fall of the year and is sought after for food. The Black Guillemots are quite tame, permitting a closer approach than others of the sea birds. They nest in the seams and cavities found in the limestone cliffs, laying their one or two eggs 4 to 6 feet in from the entrance of the cavity. The eggs are deposited directly on the small crumbling fragments of limestone. The incubating birds often remain on the nest until lifted from it. We collected eggs 3 miles west of Fox Bay and 3 miles west of Salmon River on June 21 and 26 respectively.

**Fratercula arctica arctica* (Linnaeus). Atlantic Puffin.—We found this, as have other authors, an abundant bird in the cliff areas of the north shore. These odd little "old men of the sea," with their deep, thin bills of red, orange, and yellow, would sit on the sea in small flocks of four to a dozen, permitting our boat to pass within 10 yards without flying.

While it is common knowledge that the Puffin prefers an excavated burrow to a natural cavity as a nesting location, the Puffins along the north shore of Anticosti were found nesting in the natural crevices and cavities of the cliffs. This choice of nesting site may be due to the fact that little soil covers the rocky formation of the island, making burrowing difficult or impossible.

Their single eggs were deposited on the cold, wet, muddy stone floor of the small cave-like recesses in the cliffs, usually about 4 feet, though several were 6 to 8 feet from the entrance. In some instances an infertile egg of a previous year was still almost intact near this year's fresh egg.

Zenaidura macroura carolinensis (Linnaeus). Mourning Dove.—Schmitt (1904) reports this species found during October and November but only rarely. He submitted specimens to Dionne for identification.

Ectopistes canadensis (Linnaeus). Passenger Pigeon.—Verrill (1862a) reports having seen one at Heath Point. Schmitt (1904) states that a few individuals were seen after Verrill's time but none in the ten years before 1904.

Nyctea nyctea (Linnaeus). Snowy Owl.—Combes (1896) reports that M. Malouin, keeper of West Point light, killed one. Schmitt (1904) records them as appearing irregularly in winter.

Surnia ulula caparoch (Müller). American Hawk Owl.—Schmitt (1904) found this owl common except in summer. Dionne (1920) reported them as common in 1913.

Strix varia subsp. Barred Owl.—Schmitt (1904) reports this species as rather rare.

Asio flammeus flammeus (Pontoppidan). Short-eared Owl.—Schmitt (1904) lists this owl as fairly common.

Cryptoglaux funerea richardsoni (Bonaparte). Richardson's Owl.—Schmitt (1904) found them a rather rare permanent resident.

Cryptoglaux acadica acadica (Gmelin). Saw-whet Owl.—Schmitt (1904) considered this species a rare permanent resident.

Chordeiles minor minor (Forster). Eastern Nighthawk.—Schmitt (1904) found them fairly common in summer. Brooks (1919) saw one at Ellis Bay. Dionne (1920) lists it as uncommon.

Chaetura pelagica (Linnaeus). Chimney Swift.—Schmitt (1904) considered it rather rare and found in summer only.

Archilochus colubris (Linnaeus). Ruby-throated Hummingbird.—Schmitt (1904) records seeing but 2 of this species.

Megaceryle alcyon alcyon (Linnaeus). Eastern Belted Kingfisher.—Verrill (1862a) writes, "seen, but not frequently." Combes (1896) recorded it on the Becscie River. Schmitt (1904) found it fairly common and says, "nests on the island." Dionne (1920) and Brooks (1919) both report it common. Lewis (1924) saw one at Ellis Bay, June 14.

This species was of rather rare occurrence, being seen but twice in widely separated areas. While exploring some 2 or 3 miles up-stream along the Fox River, on June 24, we saw a Kingfisher plunge from a dead spruce into a small pool of the river and emerge with what appeared to be a small trout. McCullagh observed 2 on June 30 in a small pool on Deep Bay River.

**Colaptes auratus borealis* Ridgway. Boreal Flicker.—Our experience with this species on Anticosti Island confirms the opinions of other writers that the Flicker is uncommon there. It was certainly not common around Fox Bay, although 3 individuals were seen on June 23, one mile south of our camp. A female collected June 29 at the Eel Falls Camp proved to be *Colaptes auratus borealis,* thus extending the range of that subspecies, as delineated by Ridgway (1914) and Oberholser (1938), southward from Labrador.

Phloeotomus pileatus abieticola (Bangs). Northern Pileated Woodpecker.—We are unable to find any previous record of this species from Anticosti. However,

we saw one in a heavily wooded area just west of the Fox Bay camp on June 22, 1937.

**Sphyrapicus varius atrothorax* (Lesson). Northern Yellow-bellied Sapsucker.—Although Lewis (1926) found this to be the most common species of woodpecker on Anticosti Island in late May, 1926, we recorded but one. We collected a male June 20 on a spruce ridge one mile west of the Eel Falls camp in an area where several other forms of the family *Picidae* were collected.

Oberholser (1938) has shown that Yellow-bellied Sapsuckers from the northern United States and Canada are larger than breeding birds of the middle eastern United States and deserve recognition as a distinct subspecies for which Lesson's name *atrothorax* is available.

**Dryobates villosus septentrionalis* (Nuttall). Northern Hairy Woodpecker.—The Hairy Woodpecker was observed in small numbers throughout the wooded areas explored, occurring as frequently along the timbered coast line as on the wooded ridges. Judging from our observations and the writings of others, particularly Schmitt (1904) and Dionne (1920), this species is fairly evenly distributed throughout the island.

It would seem from the writings of Macoun (1909), Cory (1878) and Austin (1932), that the Hairy Woodpecker is considered uncommon from the Magdalens northward except in Newfoundland, but our records show 11 birds and 2 nests observed during our stay on Anticosti. On June 24, one mile west of the Fox Bay camp, a Hairy Woodpecker was observed entering a cavity with food; while on June 29 another was observed to leave a cavity from which the buzz of the young could be heard. We collected 3 males and one female at Fox Bay June 19 to 25 and a female at Eel Falls on June 29.

Anticosti Island apparently marks the southeastern limit of the range of the big northern race, *septentrionalis,* since the A.O.U. Check List (1931) includes the Magdalen Islands in the range of *villosus* and Newfoundland is occupied by *terraenovae.*

**Dryobates pubescens microleucus* Oberholser. Newfoundland Downy Woodpecker.—A common species as found by Verrill (1862a). Brewster (1884) found "a pair with nest of young ready to fly, Fox Bay, July 11." Schmitt (1904) and Dionne (1920) both report this woodpecker "fairly common" while Lewis (1924) reported it as the "most common woodpecker" on Anticosti in mid June 1922.

We found this species most common along the wooded ridges in the vicinity of the Eel Falls camp, diminishing in numbers toward the coast line where only an occasional one was observed. Several nests with young ready to leave were found and other adult birds were observed carrying food. We collected 8 adults and 2 nestlings, principally at Eel Falls.

The discovery that the Downy Woodpecker of Anticosti Island belongs to the dark colored race, *microleucus,* formerly supposed to be confined to Newfoundland, was one of the more interesting results of our trip.

**Picoides arcticus* (Swainson). Arctic Three-toed Woodpecker.—Schmitt (1904) lists this species as "fairly common." Dionne (1920), "apparently rare." Brooks (1919) collected a pair. Lewis (1924) "saw one near Ellis Bay."

We saw but one pair of this species. On a wooded ridge one mile east of the Eel Falls camp on June 29 we collected a male which was carrying a spider in his bill. We finally located the nest in the cavity 15 feet from the ground in a live spruce. From concealment we watched the female enter the cavity three times with food in spite of the loss of the male.

**Picoides tridactylus bacatus* Bangs. American Three-toed Woodpecker.—Dionne (1920) reports seeing "an old female and a brood of young at Ellis Bay." Brewster (1884) reports an adult female and young seen at Ellis Bay on July 24. Schmitt (1904) lists them as "fairly common," and Brooks (1919) collected a pair.

We found more of these woodpeckers than of *Picoides arcticus,* though both were uncommon. It was observed only in the vicinity of Eel Falls where on June

28 a nest of 4 well-feathered young were found in a cavity of a spruce. We collected three adults there.

Tyrannus tyrannus tyrannus (Linnaeus). Eastern Kingbird.—Schmitt (1904) lists 2 taken May 7, 1903 at English Bay. Lewis (1925, 1926) saw one at Ellis Bay on August 1, 1924 and one near Port Menier on May 30, 1926.

**Empidonax flaviventris* (Baird and Baird). Yellow-bellied Flycatcher.—Notwithstanding the fact that Chamberlain (1887), Brewster (1884), and Lewis (1924) all reported this species common, we noted it only on June 28 when we collected 3 and saw another in the wooded area a mile west of the Eel Falls camp.

Empidonax traillii traillii (Audubon). Alder Flycatcher.—Schmitt (1904) considered this flycatcher fairly common in summer. Lewis (1924) found it fairly common at Ellis Bay in June, 1922.

Empidonax minimus (Baird and Baird). Least Flycatcher.—Lewis (1924) saw a male on June 15, 1922, at Ellis Bay.

Nuttallornis borealis cooperi (Nuttall). Eastern Olive-sided Flycatcher.—Schmitt (1904) lists it as rare. Brooks (1919) saw one September 3, 1919.

Otocoris alpestris alpestris (Linnaeus). Northern Horned Lark.—Schmitt (1904) writes that this species occurs in flocks in May, September, and October. Dionne (1920) found it fairly common during migration. Lewis (1924) saw a caged bird that had been taken on the island.

**Iridoprocne bicolor* (Vieillot). Tree Swallow.—Most authorities list this species as common and we found it one of the most abundant birds on the island. The inhabitants of the island boasted a telephone system consisting of a single steel wire, attached to any available support, encircling the island along the shore line. Early each morning the Tree Swallows would assemble by the hundreds on this single wire, like clothes-pins on a wash line. We collected several at Fox Bay on June 18.

Riparia riparia maximiliani (Stejneger). American Bank Swallow.—Verrill (1862a) lists this species as common, but since there are no other records it seems likely that the species is now either very localized or greatly diminished in numbers on the island.

Hirundo rustica erythrogastra Boddaert. Barn Swallow.—Schmitt (1904) considered this swallow a summer resident. Dionne (1920) observed it rarely. Lewis (1938b) saw 2 on July 16 at Port Menier.

Petrochelidon albifrons albifrons (Rafinesque). Northern Cliff Swallow.—Verrill (1862a) found a large colony breeding on the cliffs at the entrance to Ellis Bay on July 15. Since there are no later records, that colony evidently no longer exists.

**Perisoreus canadensis barbouri* W. S. Brooks. Anticosti Jay; Canada Jay.—W. S. Brooks (1920) originally described this insular subspecies as *Perisoreus barbouri*. Most writers agree as to the abundance of this resident species. Lewis (1924) reports, "several observed at Ellis Bay, June 10-16, 1922." Schmitt (1904), "common throughout the year." Dionne (1920), "very common."

It was reported to us by the native guides as very abundant, occurring in rather large flocks during the winter months. The native trappers tell of leaving the door of their camps open during the winter months while they obtain water and upon returning to find a half dozen Canada Jays within the cabin feeding on the crumbs and other supplies. Contrary to the usual antagonistic feeling of Canadian trappers and woodsmen in general, the native Anticosti Islanders have a friendly attitude toward the bird. It seems that during the cold winter months when supplies are low on the mainland the "poachers" visit the island to obtain deer and trap mammals. The Canada Jays' characteristic habit of being a camp follower has often led the island game protectors to these "poacher" camps. We observed only 2 of these birds in the vicinity of Fox Bay camp and collected 5 and saw two others at the Eel Falls camp. Two of those collected were juveniles.

The native state that "la pie" disappears during the summer months. Lewis (1930) confirms this with the assertion that in most years not many Canada Jays are observed near the south coast of the Labrador Peninsula in spring and summer, although in August and September, 1929, he saw many there.

We believe that the fact that this abundant bird is not observed more during the summer months is probably due to its early spring nesting and the summer nesting of the great majority of the other birds. Young Canada Jays are apparently out of the nest in May, fully matured and flying with the adults by June, and they are driven into the interior of the island by the species nesting and defending their territories in the coastal area during the summer months. Both of the Canada Jays seen at Fox Bay camp were being pursued by angry nesting Robins.

Cyanocitta cristata bromia Oberholser. Northern Blue Jay.—Combes (1896) recorded this species. Schmitt (1904) found it common in some years from May to October.

Corvus corax principalis Ridgway. Northern Raven.—Brewster (1884) found the Raven rather evenly distributed but not abundant along the Gulf of St. Lawrence. Schmitt (1904) records it as common throughout the year on Anticosti Island. Combes (1896) records it without comment.

This species was seen by our party on 3 different occasions (June 20, 21, and 28), flying over the spruce forests.

**Corvus brachyrhynchos brachyrhynchos* Brehm. Eastern Crow.—This is a fairly common species on the island, but seemingly not as abundant as Verrill (1862a), Brewster (1884), and others reported it during their visits to the island. Cory (1878) lists this form as "very abundant" on the Magdalen Islands and notes that it is "quite tame in comparison with their usual shyness."

Crows were noted by us each day, usually a single bird or pair in flight. A few fed in the kelp and debris along the shore at ebb tide and appeared as shy as elsewhere. On June 24, 3 adult birds and 2 families of young were observed. We collected a female at Fox Bay on June 19.

Penthestes atricapillus aldrichi subsp. nov. Anticosti Black-capped Chickadee.

Sub-specific characters.—Similar to *Penthestes atricapillus atricapillus,* but decidedly larger, particularly the tail; the white wing edgings somewhat more conspicuous; upper surface averaging rather darker. Similar to *Penthestes atricapillus septentrionalis,* but upper parts darker and white wing edgings narrower.

Measurements: Adult male (2 specimens): wing, 67-67.5 (average 67.25) mm.; tail, 63-64.5 (63.75); exposed culmen, 9 (9); tarsus, 17.5 (17.5). Adult female (3 specimens): wing, 65-67 mm.; tail, 61.5-64 (62.83); exposed culmen, 9.5-10 (9.83); tarsus, 16.5-17 (16.83).

Type.—Adult male No. 38068, Cleveland Museum of Natural History; Eel Falls (altitude 250 feet), Fox Bay, Anticosti Island; June 29, 1937, Frank W. Braund and E. Perry McCullagh.

Range.—As far as we are aware, confined to Anticosti Island.

Remarks.—This new race of Black-capped Chickadee is geographically most closely associated with *P. a. anamesus* Todd (1938) which is said to extend south to the north shore of the Gulf of St. Lawrence. *P. a. aldrichi* is apparently an insular form separated by the waters of the Gulf of St. Lawrence from one subspecies to the north, and another (*atricapillus*) on the Gaspé Peninsula to the south.

This chickadee, while fairly common in the wooded areas, was less numerous than the Acadian Chickadee by a ratio of 1 to 2. Several families of young were observed in the vicinity of Eel Falls camp. On June 29 Braund flushed a chickadee of this species from a cavity of a spruce stump. Upon investigation, a newly

constructed nest without eggs was found, composed entirely of white hair of the white-tailed deer.

Specimens collected: 2♂, 3♀ Fox Bay and Eel Falls, June 22 to 29.

**Penthestes hudsonicus littoralis* (Bryant). Acadian Chickadee.—We found this bird much more common than *Penthestes atricapillus,* occurring in restless groups in the wooded and semi-wooded areas. Several families of young were noticed with adult birds. The song of this chickadee is similar to that of *Penthestes atricapillus,* though a little shorter and of higher pitch. We collected 6 males and 7 females at Fox Bay June 19 to 30.

**Sitta canadensis canadensis* Linnaeus. Red-breasted Nuthatch.—Reported common by Verrill, Dionne, and Brooks, while Lewis (1924) reports, "Two observed at Ellis Bay on June 14 and again on June 15, 1922."

But 6 Red-breasted Nuthatches were observed by our group during the entire time spent on the island. They were noted both at the Fox Bay and Eel Falls camps.

Certhia familiaris anticostiensis subsp. nov. Anticosti Brown Creeper.

Sub-specific characters.—Similar to *Certhia familiaris americana,* but adult above decidedly more grayish (less ochraceous), and averaging more whitish below; juvenile, much more grayish above than is the juvenile of *Certhia familiaris americana,* and also much more whitish below (less buffy or grayish). Similar to *Certhia familaris montana,* but smaller, especially the bill and wing; also averaging more whitish below, especially in juvenile plumage.

Measurements.—Adule male (1 specimen): Wing, 63.5; tail, 55; exposed culmen 14; tarsus, 15. Adult female (1 specimen): wing, 64; tail, 58; exposed culmen, 14; tarsus 14.5.

Type.—Adult female No. 38069, Cleveland Museum of Natural History, Eel Falls (altitude 250 feet), Fox Bay, Anticosti Island, June 28, 1937; Frank W. Braund and E. Perry McCullagh.

Range.—To the best of our knowledge, confined to Anticosti Island. Lewis (1926) reported this bird on Anticosti May 26, 1926 1¼ miles south of Port Menier.

We found the Brown Creeper uncommon and localized in places containing dead timber with decaying stumps. On June 28, while working an area one mile west of the Eel Falls camp, we observed 5 individuals about dead spruce stumps. The next day Moulthrop found 7 in a similar place, along a ridge 1½ miles east of Eel Falls. The only other Brown Creeper noted was a single bird in a fallen tree area along Deep Bay river.

Specimens collected: 1 ♂, 1 ♀, 1 juv. ♀, Eel Falls, June 28.

* *Nannus troglodytes hiemalis* (Vieillot) Eastern Winter Wren.—Although Lewis (1924) considered this wren "fairly common" at Ellis Bay in June, 1922, we found it rather rare. It was observed only in the vicinity of the Eel Falls camp. There we collected a male and saw another individual along the spruce ridges and heard a third singing in a densely foliaged spruce.

Mimus polyglottos polyglottos (Linnaeus). Eastern Mockingbird.—Schmitt (1904) collected a single specimen at English Bay on August 8, 1902.

**Turdus migratorius migratorius* Linnaeus. Eastern Robin.—All naturalists who have visited Anticosti Island agree about the abundance of this species. We found it extremely abundant all along the sea coast, diminishing in numbers inland to the first ridge where, at Eel Falls, none were seen or heard. We collected one adult female at Fox Bay June 19. While Robins usually are somewhat pugnacious, those on Anticosti seem especially resentful of having their territory invaded. In exploring along the sea coast one's progress was continually dogged by scolding, protesting Robins. Nests were observed at low elevations on dense horizontal

limbs of the spruce. A set of 4 eggs collected June 19 were about half incubated but a set of 3 taken on June 24 proved to be fresh.

Hylocichla guttata faxoni Bangs and Penard. Eastern Hermit Thrush.—Verrill (1862a) and Dionne (1920) list this species as common. Brewster (1884) called it "abundant." Lewis (1924) saw 2 at Ellis Bay.

**Hylocichla ustulata almae* Oberholser. Alma's Thrush.—One of the most interesting discoveries arising from the study of our collection was that the Olive-back Thrush of Anticosti Island belongs to the Rocky Mountain race. Here is another case like that of *Hylocichla fuscescens* and *Melospiza georgiana,* where the supposedly western subspecies has been found to occur also on the Atlantic Coast to the north of the eastern race. It will be interesting to see whether examination of specimens of *Hylocichla ustulata* from northern Ontario and Quebec will show that *H. u. almae* has an unbroken range across northern North America, from the Rocky Mountains to the Gulf of St. Lawrence.

This thrush appeared to be rather common inland in the more densely wooded areas. The extreme shyness of the birds made it almost impossible to approach near enough to make positive identification by sight. At the Eel Falls camp, on June 28, 20 singing males were heard during the early morning and late afternoon hours. We collected a female near Fox Bay on June 25 and a male at Eel Falls on June 29. A set of 3 eggs taken near Fox Bay on June 25 proved to be slightly incubated.

Hylocichla fuscescens subsp. Veery.—Schmitt (1904) reports this species fairly common in summer. Brewster (1884) saw a pair at Ellis Bay on June 24.

Sialia sialis sialis (Linnaeus). Eastern Bluebird.—Schmitt (1904) found it rather rare.

**Regulus satrapa satrapa* (Lichtenstein) Eastern Golden-crowned Kinglet.—Schmitt (1904) reports this kinglet as rather rare. We collected a male at Eel Falls on June 29 as it was singing in the upper branches of a spruce at the edge of a muskeg.

**Corthylio calendula calendula* (Linnaeus). Eastern Ruby-crowned Kinglet.—There seems to be a variance of opinion in regard to the abundance of this species. Schmitt (1904) records it as rare, Lewis (1924) writes, "not common at Ellis Bay, June 1922," while Dionne (1920) reports it as common. Brewster (1884) saw a female at Fox Bay July 11.

We found this kinglet rather common in the vicinity of the Fox Bay camp where on June 23, seventeen were reported as seen or heard singing. A few were noted at the Eel Falls camp along the wooded ridges. On the whole, they seemed to prefer the thinly wooded area to the larger and denser growths. We collected two males at Fox Bay (June 18 and 25).

Anthus spinoletta rubescens (Tunstall). American Pipit.—Schmitt (1904) found them fairly common in summer, while Dionne (1920) found them common especially in autumn. Brooks (1919) saw 2 flocks in September.

Bombycilla cedrorum Vieillot. Cedar Waxwing.—Schmitt (1904) lists it as a rather rare summer visitor.

Lanius exubitor borealis Vieillot. Northern Shrike.—Schmitt (1904) reports a few individuals seen in late April but more in autumn. Dionne (1920) lists it as common.

Vireosylva olivacea (Linnaeus). Red-eyed Vireo.—Verrill (1862a) seems to be the only naturalist to date to list this species for Anticosti Island. Although he considered it common, we saw but 2, evidently a pair, at Fox Bay on June 18.

Mniotilta varia (Linnaeus). Black and White Warbler.—Brewster (1884) heard a male singing at Fox Bay on July 9, and collected one July 11. Dionne (1920) found it rather rare. Brooks (1919) saw several in September. Lewis (1924) found it rather common at Ellis Bay in June, 1922.

**Vermivora peregrina* (Wilson). Tennessee Warbler.—Macoun (1909) quotes Brewster as writing, "The only specimen noticed was shot at Fox Bay, Anticosti, July 11." Lewis (1924) saw 2 individuals at Ellis Bay 1922.

We collected 5 males at Fox Bay June 18 to 27. This warbler was not as common as the number of specimens collected might indicate, being probably the least numerous of the warblers observed on the island. They preferred the sparse spruce woodlands of the soft mucky valleys, or the areas along the fast running brooks and streams.

Vermivora ruficapilla ruficapilla (Wilson). Nashville Warbler.—Lewis (1924 saw 2 individuals of this species at Ellis Bay June 13, 1922.

Compsothlypis americana pusilla (Wilson). Northern Parula Warbler.—Brewster (1884) saw a single male at Fox Bay, July 11.

**Dendroica aestiva amnicola* Batchelder. Newfoundland Yellow Warbler.—Yellow Warblers of Anticosti Island proved to belong to the same race as Newfoundland birds instead of *D. ae. aestiva,* the race common to most other sections of eastern North America.

Verrill (1862a) reports seeing a few; Lewis (1924) lists them as fairly common at Ellis Bay June, 1922. Brewster (1884) writes, "One of the most abundant of its family at Fox Bay."

We found Yellow Warblers uncommon. On June 23, while walking along the ridge, one mile west of the Fox Bay camp, and within 50 yards of a calm sea, we observed 5 of these birds in a hundred yard area. A diligent but unsuccessful search was made through the sapling spruce for possible nests. The following day, in same locality, 2 Yellow Warblers were observed, but no other individuals were encountered during our visit on the island. We collected 2 males and one female.

**Dendroica magnolia* (Wilson). Magnolia Warbler.—Brewster (1884) lists this species as "More abundant than any other species of its family at Fox and Ellis Bays." Verrill (1862a) collected a specimen at Ellis Bay. Dionne (1920) and Lewis (1924) found it common.

This was a common species in the cut-over areas and sapling growths along the coast. Magnolia Warblers were observed at the Fox Bay camp at Deep Bay and Salmon River locations, but none in the interior or in the vicinity of the Eel Falls camp. We collected 5 males at Fox Bay, June 19 to 26.

Dendroica caerulescens caerulescens (Gmelin), Black-throated Blue Warbler.—Although this species is apparently unrecorded by former students of Anticosti birds, on two occasions (June 18 and 22) we heard males singing in the dense spruce boughs. Each time a patient wait of about half an hour finally resulted in a view of the songster.

**Dendroica coronata coronata* (Linnaeus). Myrtle Warbler.—This species was reported by past writers as common on Anticosti, with which opinion we are in accord. The general habitat of the Myrtle was much more diversified than that of the Magnolia Warbler. It appeared commonly in the second-growth spruce groves along the coast, and equally in the wooded spruce forests, inland. During a half day's exploration of the upper waters of Fox River, 7 singing males were seen or heard. We collected 4 males and 4 females on Anticosti.

A nest with 3 fresh eggs found in this locality June 18 was composed of small spruce twig ends interwoven with medium sized dry grasses, lined with the white hair from the tail of the Virginia deer and a half dozen small feathers. The nest straddled a crotch of a densely foliaged sapling spruce limb, 3 feet from the ground, and was so well concealed that a stray protruding straw provided the only clue to its location.

**Dendroica virens virens* (Gmelin). Black-throated Green Warbler.—Brewster (1884) saw this species at Fox and Ellis Bays. Dionne (1920) and Brooks (1919) also observed it on Anticosti. Lewis (1924) found it common at Ellis Bay in June, 1922.

We found this warbler very abundant throughout the areas explored, with a seeming concentration along the heavily wooded ridges in the vicinity of the Eel Falls camp, where on June 29, 36 individuals were seen or heard singing. The territory of the singing males averaged about 200 yards in diameter. Although the birds were concealed in the dense growth of spruce, their incessant insect-like song betrayed their presence as we walked for miles along the ridge. We collected 4 males at Fox Bay and 3 at Eel Falls.

**Dendroica breviunguis* (Spix). Black-poll Warbler.—Brewster (1884) records Black-poll Warblers as "Decidedly the most numerous of the warblers on the Magdalen islands, and fairly common at Anticosti as well." Lewis (1924) says "They are fairly common at Ellis Bay June, 1922." Dionne (1920), however, refers to this warbler as "rather rare."

In our experience this species proved to be one of the most abundant of the warbler group, outnumbered only by the American Redstart. While the Black-poll was observed throughout the area covered, its concentration appeared to be along the coast, where on June 23, 22 individuals were observed in the vicinity of the Fox River camp. We collected 4 males and 8 females there.

Seiurus aurocapillus (Linnaeus). Oven-bird.—Verrill (1862a) obtained a specimen at Ellis Bay July 15. Brewster (1884) observed a single pair at Ellis Bay July 24. Schmitt (1904) and Dionne (1920) both list it as rather rare. Lewis (1924) saw two on June 13, 1922 and one on June 15.

We saw but one pair, and that on June 29, in a damp and boggy area bordering a muskeg. The male was heard and seen singing, and the female was shortly afterwards flushed from a dense growth of vegetation.

Seiurus noveboracensis noveboracensis (Gmelin) Northern Water-thrush.—Brooks (1919) saw several near Ellis Bay. Lewis (1924) saw one on June 13, and three on June 14, 1922. Lewis (1926) considered this species fairly common after May 28.

***Geothlypsis trichas pelagitis** subsp. nov. Anticosti Yellow-throat.

Sub-specific characters.—Similar to *Geothlypis trichas brachidactyla* but smaller, the upper surface duller and more grayish (less greenish or yellowish). Crissum duller.

Measurements.—Adult male (3 specimens): wing 52.5-58 (average 54.83) mm.; tail 47-52.5 (49.75); exposed culmen, 10.5-11 (10.83); tarsus, 19.5-21 (20.5).

Type.—Adult male, No. 38070, Cleveland Museum of Natural History; Eel Falls, altitude 250 feet, Fox Bay, Anticosti Island; June 28, 1937; Frank W. Braund and E. Perry McCullagh.

Geographic Distribution.—Apparently confined to Anticosti Island. Lewis (1924), Verrill (1862a), and Schmitt (1904) found Yellow-throats to be common on Anticosti Island, while Dionne (1920) found them rare, and Brooks (1919) saw only three.

We found this Yellow-throat common along the marshy borders of the muskeg areas in the vicinity of the Eel Falls camp, where on June 23, 17 were seen.

Specimens collected: 3 males, Fox Bay and Eel Falls, June 23 to 28.

Wilsonia pusilla pusilla (Wilson). Wilson's Warbler.—Schmitt (1904) found this species rather rare. Brooks (1919) saw them on August 24 at Ellis Bay. Brewster (1884) saw adults feeding young at Ellis Bay. Lewis (1924) found them common at Ellis Bay.

Wilsonia canadensis (Linnaeus). Canada Warbler.—Dionne (1920) saw but two. Lewis (1924) writes, "In a letter dated January 11, 1924, Mr. Willie La Brie has kindly furnished me with the following details concerning the observations, made by him, upon which Dionne's record, quoted above, was based: 'I found a pair of these birds, male and female, during the summer of 1917. I saw this pair several times, and I believe that they nested there, for I saw the female in June carrying

fibrous material in her beak. I saw the same pair again in July, at the same place, apparently much distressed at my presence, causing me to believe that their nest must be near. I saw only this pair.'"

**Setophaga ruticilla ruticilla* (Linnaeus). American Redstart.—Brewster (1884) found this bird not uncommon at Ellis and Fox Bays. Verrill (1862a) and Dionne (1920) reports them as common. Lewis (1924) found them "Very common at Ellis Bay in June, 1922."

We consider this warbler the most abundant of all the land birds occurring on the north shore of Anticosti. There appeared to be no variation in abundance in any of the areas visited except the muskegs. One forenoon Braund explored a group of small lakes situated 3 miles west and along the coast from the Fox River camp. The route to this location was along the wind-swept and storm-blown cliff summits where great areas of up-rooted, twisted spruces lay dead and bleached in windrows. The only bird observed in the 3 miles of travel was the Redstart. Our records show 42 Redstarts observed on June 24. We collected 8 males and 2 females at Fox Bay June 18 to 24.

On June 22, Braund heard what appeared to be a singing male in a spruce, and after establishing his location, he watched the bird through his glasses and took it to be a young male in immature plumage in full song. When he collected the bird it proved to be an adult female.

Passer domesticus domesticus (Linnaeus). English Sparrow.—Schmitt (1904) collected a male and a female and saw another female at Ellis Bay in December, 1901.

**Euphagus carolinus* (Müller). Rusty Blackbird.—The Rusty Blackbird is not a very common species, as is attested by Lewis (1926) who saw but one at Port Menier; Lewis (1938b), however, saw 12 near Port Menier on July 16. Dionne (1920) "observed a small flock."

A few pairs of Rusty Blackbirds were noted by our party in the vicinity of the salt water lagoons of Fox River and, from their actions, appeared to be nesting or attending young. At the wooded edge of a muskeg south of the Eel Falls camp a pair harried our progress with open beaks and out-spread wings but we failed to find the nest. We collected 2 males at Fox Bay, June 23 to 24.

**Quiscalus aeneus* (Ridgway). Bronzed Grackle.—Lewis (1926) frequently observed this bird at Port Menier, but Dionne (1920) says it is apparently rare.

We found this species a little more numerous than the Rusty Blackbird and occupying the same general habitat. We observed the Bronzed Grackle at Ellis Bay on the southwestern point of the island, as well as on the north shore. On June 24, a juvenile grackle, barely able to fly, was noticed at the Fox Bay camp. We collected a male and a female at Fox Bay June 18 to 19.

Molothrus ater ater (Boddaert). Eastern Cowbird.—Lewis (1924) saw a male in a cage at Ellis Bay, taken on the island.

Hedymeles ludovicianus (Linnaeus). Rose-breasted Grosbeak.—Schmitt (1904), verified by Dionne, collected this species on Anticosti and lists it as rare.

Spiza americana (Gmelin). Dickcissel.—We quote from Lewis (1924), "Dionne: Accidental. Mr. La Brie found a specimen dead on the island. This specimen was examined by Dionne. This specimen is now mounted and in Mr. La Brie's private collection, where I have seen it."

**Carpodacus purpureus purpureus* (Gmelin). Eastern Purple Finch.—Lewis (1924) observed two at Ellis Bay June 14, 1922 and saw other locally captured caged individuals. Although Lewis (1926) saw several daily at Ellis Bay in late May, 1926, we found it only in the second growth spruce in the vicinity of the Fox Bay camp. Our records show but 6 individuals seen or heard, 3 of which we collected.

Pinicola enucleator eschatosus Oberholser. Newfoundland Pine Grosbeak.—Schmitt (1904) lists this species as fairly common throughout the year. Dionne (1920) found it fairly common.

Spinus pinus pinus (Wilson). Northern Pine Siskin.—Brewster (1884) found it in flocks on July 24 at Ellis Bay. Schmitt (1904) considered it a fairly common permanent resident bird, breeding on the island. Brooks (1919) saw a large flock September 3. Lewis (1924) observed 3 at Ellis Bay on June 14.

**Spinus tristis tristis* (Linnaeus). Eastern Goldfinch.—Henry Mousley (1932) found this species common on August 23, near St. Lambert, Quebec, and states that many nest. Brewster (1884) found them common at Gaspé, Quebec, "but not common anywhere else on the Gulf of St. Lawrence." On Anticosti Island Dionne (1920) found it rare. Brooks (1919) "saw a small flock on September 3." Lewis (1924) saw two on June 14 and one June 15 at Ellis Bay.

Since the time of our visit on the island was a little ahead of the breeding season of this species, it may have been more abundant than our observations would indicate. On June 26 at Fox Bay a flock of 5 was noted and a female collected, while on June 28 a flock of approximately 40 was seen in the vicinity of Eel Falls camp.

Loxia leucoptera leucoptera (Gmelin). White-winged Crossbill.—Brewster (1884) saw a flock of 8 or 10 at Ellis Bay on July 24. Schmitt (1904) writes "fairly common throughout the year." Lewis (1924) says Taverner saw 2 at Ellis Bay July 13, 1915. Brooks (1919) saw a single bird at Ellis Bay August 28, 1919. Dionne (1920) says that these crossbills were fairly common.

**Passerculus sandwichensis labradorius* Howe. Labrador Savannah Sparrow.—The various observers of the avifauna of Anticosti agree on the abundance of this species. We found the Savannah Sparrow common inland, on the dryer areas surrounding the muskeg, as well as along the coast. In the vicinity of the Eel Falls camp on June 29 fifteen were observed, and in the numerous bogs bordering Fox River, several pairs were seen. On a low ridge between the sea and one of these bogs a nest with 3 fresh eggs was found, concealed in a tuft of grass. The nest was composed of coarse native grasses, becoming progressively finer inward, to the lining, which was composed of fine dry grasses. The outside dimensions of the nest were 6 inches across by 3 inches deep; the bowl had a diameter of 2¼ inches, and a depth of 1¼ inches. A nest found at Eel Falls June 29 contained 4 slightly incubated eggs. We collected 6 adult birds, 3 of each sex.

The discovery that the breeding Savannah Sparrows of Anticosti Island are *labradorius* extends the range of that form slightly southward from the Mingan Islands, where it was recorded by Peters and Griscom (1938).

**Junco hyemalis hyemalis* (Linnaeus). Slate-colored Junco.—Verrill (1862a) found this species common in summer. Dionne (1920) and Schmitt (1904) report them common, while Lewis (1924) writes "not common at Ellis Bay in June, 1922."

Juncos proved to be fairly common in the dryer, sparsely wooded areas visited by us, as well as the wooded ridges. While no nests were found, it was noticeable that when seen, the birds were paired. We collected 5 males and one female.

Spizella arborea arborea (Wilson). Eastern Tree Sparrow.—Verrill (1862a) found this species common and breeding; Brewster (1884) records one as collected. Dionne (1920) considers it rare. Lewis (1924) doubts that it breeds, though considers that it may to some extent.

Spizella passerina passerina (Bechstein). Eastern Chipping Sparrow.—Lewis (1924) heard and saw 2 males in song at Ellis Bay on June 14 and again on June 15, 1922. Lewis (1926) records one individual at Port Menier on May 30, 1926.

Zonotrichia leucophrys leucophrys (Forster). White-crowned Sparrow.—Schmitt (1904) and Dionne (1920) both list it as rather rare. In 1922 Lewis (1924) was shown a locally taken caged bird and on his later trip (1926) found the species in small numbers from May 20 to June 1.

**Zonotrichia albicollis* (Gmelin). White-throated Sparrow.—Verrill (1862a) writes of this species "By far the most common singing bird on Anticosti." All other writers agree as to its abundance.

We also found the White-throated Sparrow an abundant bird in the vicinity

of both our camps, occurring in the dry localities of the grassy, second growth spruce areas, as well as the dry grassy borders of the muskegs. Its nests were on the ground, well concealed in the high grass at the bases of spreading spruce saplings. A male sang continuously during the daylight hours scarcely a 100 feet south of our Fox River camp, and though we spent several hours from time to time attempting to discover a nest, we were unsuccessful. We took 5 specimens at Fox Bay, June 18 to 23.

**Passerella iliaca iliaca* (Merrem). Eastern Fox Sparrow.—A variance of opinion exists among the previous observers of Anticosti Island birds in regard to the abundance of this species. Verrill (1862a) reports it common and breeding; Brewster (1884) found it "Particularly abundant at Fox Bay"; Dionne (1920), Brooks (1919), and Lewis (1924), found it common. Schmitt (1904), on the other hand, considered it rather rare. We found the Fox Sparrow uncommon and observed it only in the vicinity of the Fox Bay camp and along the sea coast. Our records show a total of but 6 individuals seen or heard. On June 30, at Deep Bay (9 miles west of Fox River) a pair was seen feeding fully feathered young. We collected 2 adult males and a juvenile female at Fox Bay, June 23 to 26.

Verrill (1862b) described a new species of *Passerella* from Anticosti Island, but subsequent examination of the type by Bangs (1930) has shown it to be an immature specimen of *iliaca*.

Melospiza lincolni lincolni (Audubon). Lincoln's Sparrow.—Brooks (1919) collected a female September 6. Lewis (1926) saw one at Port Menier on May 23, and again on May 29; also he (1938b) heard two singing there July 16, 1938.

**Melospiza georgiana ericrypta* Oberholser. Western Swamp Sparrow.—Lewis (1924) found the Swamp Sparrow rather common at Ellis Bay in June, 1922. Brewster (1884) lists it as abundant. Schmitt (1904) reports it as rare in summer. Dionne (1920) writes "Fairly common." Brooks (1919) says, "Apparently rare. One taken at Ellis Bay September 5."

We found the Swamp Sparrow fairly common and in about equal numbers at the Eel Falls camp and the Fox Bay camp. It definitely preferred the wet grassy areas of the muskeg and the boggy marshlands along the coast line. We collected 5 males and 3 females at Fox Bay, June 18 to 28. Nests were situated 6 to 12 inches above the ground in the thick high grass, usually under dwarf spruces. A nest collected June 24 is similar in construction to that of the Savannah Sparrow and measured 4½ inches in diameter by 2¼ inches deep, with a bowl diameter of 2¼ inches and a depth of one inch. This nest contained 4 fresh eggs as did another nest found there June 19.

The discovery that the breeding swamp Sparrows of Anticosti Island are *Melospiza georgiana ericrypta* Oberholser (1938) extends the range of that supposedly western form from the prairie region of Canada to the Gulf of St. Lawrence, and is one more example of the discovery in northeastern America of subspecies first described from the west. It still remains to be demonstrated, however, that the ranges of these western forms across Canada to the Atlantic Coast are continuous.

Melospiza melodia melodia (Wilson). Eastern Song Sparrow.—Dionne (1920) records this bird as very rare. Lewis (1924) saw a singing male at Ellis Bay June 14 and 15, 1922. Lewis (1926) writes, "Remains rare in the vicinity of Port Menier. But three individuals recorded."

This bird proved an elusive species which defied our collecting. It was heard singing on two occasions and was seen on two others, between June 18 and 22.

Calcarius lapponicus lapponicus (Linnaeus). Lapland Longspur. Dionne (1920) lists it as common, presumably in migration only.

Plectrophenax nivalis nivalis (Linnaeus). Eastern Snow Bunting.—Schmitt (1904) and Dionne (1920) list this species as common during migration, spring and fall. Lewis (1926) saw a flock of thirteen on May 20, fifteen on May 21.

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Cleveland, Ohio

Ornithological News

During the month of April the American Museum of Natural History exhibited a "one-man show" of bird paintings by George Miksch Sutton.

Paul Geroudet, editor of *Nos Oiseaux,* has been mobilized and Alfred Mayor is assuming his duties for the present.

Dr. Stresemann writes that Dr. H. Sick is "still in eastern Brasil, unable to return from there and is making the best use of his time by studying the life history of various tropical birds, especially the Pipridae."

The program of the Eighth American Scientific Congress held in Washington May 10 to 21 included ornithological papers by Frank M. Chapman, I. N. Gabrielson, Ludlow Griscom, W. H. Phelps, Oliverio Pinto, and William Vogt.

Many of our readers will probably be surprised to learn that Florence M. Bailey's "Birds of New Mexico" is still available at the original price of $5.00 ($10.00 for the deluxe edition). Orders should be directed to the "Department of Game and Fish, Santa Fe, New Mexico."